

# FIRE II Cirrus

## Mission Summary



**Date: December 1, 1991**  
**Julian Day: 335**  
**Experiment Day: 19**

[Summary](#) | [Active Sensors](#) | [Passive Sensors](#) | [Sonde and Sfcmet](#)

Mission Scientist: None  
 Deputy Mission Scientist: None

### Mission Objectives:

No specific cirrus objective as weather conditions were not favorable.

### Mission Description:

No mission flown and most ground systems also stood down.

### Weather Synopsis:

Cold and cloudy all day in southeast Kansas. Intermittent sleet and freezing rain fell from mid-morning into the afternoon. The temperature never reached the freezing mark after morning lows in the mid twenties. The precipitation and low cloud cover were the result of overrunning of warm moist Gulf of Mexico air over a very shallow pool of cold polar air. Areas south and east received more steady precipitation with almost an inch of ice in the Tulsa area.

### Synoptic Situation:

A long wave trough was over the western third of the country allowing very cold air to spill into the Rockies and Plains. A storm over Arizona lost its punch during the day, but warm air flowing north from the Gulf overran a cold front to our south and brought precipitation in the form of sleet freezing rain, rain and thunder storms to Texas, Oklahoma, Arkansas and southeastern Kansas. A really nice baroclinic leaf cirrus shield were overhead on Sunday but was only seen in the satellite imagery.

Aircraft	Depart	Land	Notes
All Aircraft			No flights

Satellite	Hub Overpass Time	Zenith Angle	Azimuth Angle	RAOB
NOAA-11	20:14:00	51.98	68.98	yes
	10:18:53	40.59	288.54	no
NOAA-12	14:59:00	48.92	289.25	yes
	00:39:06	58.85	68.06	failed

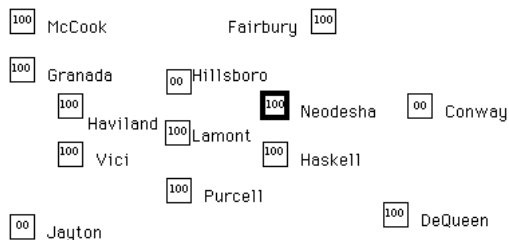
### Rawinsonde Operations:

- Inner NWS stations (Type A): Routine @ 12 and 00 UTC
- Outer NWS stations (Type B): Routine @ 12 and 00 UTC
- Hub CLASS station: Satellite overpasses @ 15, 20 and 01 UTC
  - (01 sonde ended at 700 mb due to icing)
- Remote CLASS stations: No launches
- Hub GSFC/WFF station: No launches
- CSU Parsons station: No launches

### FIRE Profiler Status:

- CSU 405 MHz @ Parsons: Continuous operation
- PSU 50 MHz @ Coffeyville: Continuous operation
- NOAA 405 MHz @ Coffeyville: Not operational

### NWS Wind Profiler Status:



### SPECTRE Operations:

No operations. Poor weather conditions.

No FIRE Highlights Today.



## Instrument Logs

### Active Sensors

Active Sensor	UTC Hour																								Notes
	12	13	14	15	16	17	18	19	20	21	22	23	00	01	02	03	04	05	06	07	08	09	10	11	
Utah Lidar H																									NO OBSERVATIONS
LaRC Laser Ceilometer H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Wisc HSR Lidar H																									NO OBSERVATIONS
Wisc Vol Image Lidar																									NO OBSERVATIONS
GSFC RAMAN Lidar H																									NO OBSERVATIONS
NOAA CO2 Lidar H																									NO OBSERVATIONS
NOAA Radar H																									NOT OPERATIONAL
PSU Radar H																									NO OBSERVATIONS
PSU Laser Ceilometer H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
PSU 50 MHZ Wind Prof H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
PSU/NOAA 50 MHz RASS H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
NOAA 405 MHz RASS H																									NOT OPERATIONAL
LaRC Lidar P																									NO OBSERVATIONS
CSU Wind Prof/RASS P	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	NO RASS
CSU Laser Ceilometer P	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

### Passive Sensors

Passive Sensor	UTC Hour																								Notes
	12	13	14	15	16	17	18	19	20	21	22	23	00	01	02	03	04	05	06	07	08	09	10	11	
NOAA $\mu$ -wave Radiometer H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
NOAA Sun Photometer H																									NO OBSERVATIONS
NOAA H20 Photometer	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
NOAA IR Flux Radiom. H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
NOAA Dobson Ozone H																									NO OBSERVATIONS
NOAA Surface Ozone H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
NOAA Trace Gas H																									NO OBSERVATIONS
PSU $\mu$ -wave Radiometer H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	ICE ON REFLECTOR AFTER 00 UTC
PSU Sun Photometer H																									NO OBSERVATIONS
PSU Solar Flux Radiom. H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	ICE ON LENS AFTER 00 UTC
PSU IR Flux Radiometers H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	ICE ON LENS AFTER 00 UTC
PSU Sky Video H																									NO OBSERVATIONS
Utah IR-Window Radiom. H																									NO OBSERVATIONS
Utah Sky Video H																									NO OBSERVATIONS
LaRC Video H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
AFGL Sky Imager H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Ames Radiometer H																									NO OBSERVATIONS
Denver Solar Radiom. H																									NO OBSERVATIONS
Denver IR-Spectrometers H																									NO OBSERVATIONS
GSFC IR-Spectrometer H																									NO OBSERVATIONS
Wisc. IR-Spectrometer H																									NO OBSERVATIONS
MRI Sun Photometer H																									NO OBSERVATIONS
MRI IR Radiometer H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
MRI Spectro-Radiom. H																									NO OBSERVATIONS
MRI Solar Flux Radiom. H	X	X	X	X	X	X	X	X	X	X	X														
GSFC Sun Photometer H																									
CSU Sun Photometer P																									NO OBSERVATIONS
CSU IR-Window Radiom. P																									NO OBSERVATIONS
CSU Solar Flux Radiom. P		X	X	X	X	X	X	X	X	X	X														
CSU IR Flux Radiometers P	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CSU IR-Spectrometer P																									NO OBSERVATIONS
CSU Sky Video P																									NO OBSERVATIONS
Ames Spectroradiometer H																									NO OBSERVATIONS
Ames 10 $\mu$ m narrow fov H																									NO OBSERVATIONS

[^ Top of Page](#)

## Sonde and Surface Meterology

[illegible]